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**PRELIMINARY ASSESSMENT EQUIVALENT REPORT  
WELTMAYER AUTO SITE  
a.k.a. ACID SPILL SITE  
HARVEY, COOK COUNTY, ILLINOIS  
TDD: S05-9611-013  
PAN: 6B134NSIXX  
CERCLIS ID: IL0002093144**

**September 10, 1998**

**Prepared for:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Site Assessment Section  
77 West Jackson Boulevard  
Chicago, Illinois 60604**

Prepared by: Jeffrey Hughes Date: 9/10/98  
Jeffrey Hughes, START Member

Reviewed by: M.J. Ripp Date: 9/10/98  
M.J. Ripp, START Assistant Program Manager

Approved by: Thomas Kouris Date: 9/10/98  
Thomas Kouris, START Program Manager



**ecology and environment, inc.**

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## **1. Introduction**

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) has been tasked by the United States Environmental Protection Agency (U.S. EPA) to complete a Preliminary Assessment (PA) Equivalent Report for the Weltmeyer Auto (a.k.a. Acid Spill) site under Technical Direction Document (TDD) S05-9611-013. The PA Equivalent Report is based on information and data from the Letter Report prepared by E & E, and information provided by personnel involved with the emergency response and removal actions at the site. Additional details on the response action, including photodocumentation and validated analytical results, are available in the U.S. EPA Region 5 site file.

## **2. Site Description**

The Weltmeyer Auto site is an inactive truck and automotive repair shop located at 14752 Spaulding Avenue in Harvey, Cook County, Illinois (Appendix A). Geographical coordinates for the site are latitude 41°37'17.6" N, and longitude 87°39'30.4" W. The site is located in a suburban mixed residential and industrial area. The site is bordered to the northeast by Spaulding Avenue and the Grand Trunk Western Railroad, to the south by 148th Street, to the southwest by an alley, and to the north by 147th Street.

The Weltmeyer Auto site consisted of a garage complex, four tankers, and two storage trailers. Prior to the U.S. EPA emergency response action at the site, wastes were stored in tankers and in drums, bags, and small containers inside the garage complex. The site was overgrown with vegetation and in disrepair (Appendix B). The site is unsecured and easily accessible to the public. Unauthorized metal salvaging operations routinely occurred at the site.

There are 3,918 households with approximately 12,429 persons located within a 1-mile radius of the site (Appendix C). There are 10 schools located within a 1-mile radius of the site. The site terrain is flat, with runoff entering city storm sewers on Spaulding Avenue. The nearest surface water to the site is the Little Calumet River, a perennial stream located approximately 0.8 mile northeast of the site (Appendix A). Municipal drinking water in the vicinity of the site is supplied to the City of Harvey by the City of Chicago from intakes located in Lake Michigan (Appendix D).

### **3. Previous Assessment and Removal Activities**

On October 22, 1997, an acid spill from a tanker on the east side of the site was reported to the Illinois Environmental Protection Agency (IEPA). The tanker was apparently being salvaged for its metal content and holes were cut into it to drain the acid. On October 23, 1997, emergency responders from U.S. EPA, IEPA, and START met on site with officials from the Harvey Police and Fire Departments. The acid apparently pooled on the ground, reacted with underlying soil, and flowed downgradient under a neighboring storage trailer (Appendix B).

START conducted air monitoring, and collected three samples from the tankers, one soil sample from the spill area, one sample from a bag of solid material, and two drum samples. Results of air monitoring indicated no levels above background for volatile organic gases, explosive gases, oxygen, carbon monoxide, or hydrogen sulfide (Appendix B). All samples were analyzed for pH and total metals. The three tanker samples (T-01, T-03, T-04) were analyzed and indicated pH levels of 1.65, 1.83, and 1.72 standard units, respectively. These results indicated that the samples were classified as hazardous wastes due to corrosivity under regulations of the Resource Conservation and Recovery Act (RCRA). Analytical results indicated that the liquid in the tankers, the soil in the spill area, the contents of the bag of material, and one of the drums (labelled D-01) were acids. The contents of the remaining drum (labelled S-03) was considered ignitable under RCRA regulations. Two 55-gallon drums of paint were stored outside of the garage building.

Due to the threat to human health and the environment posed by the waste materials contained in the tankers and stored inside the garage, U.S. EPA determined that a removal action at the site was warranted. On October 24, 1997, the U.S. EPA's Emergency Response Cleanup Services (ERCS) contractor mobilized for a removal action at the site. U.S. EPA On-Scene Coordinator Fred Bartman and START assisted with the removal action. Approximately 10 cubic yards (yd<sup>3</sup>) of soil, excavated to a depth of 4 inches below ground surface (bgs), were removed from the spill area (Appendix B). Approximately 12,000 gallons of liquid acid and 3,300 gallons of acid sludge were removed from the

tankers and transported off site for treatment and disposal. The tankers were then cut into 6- by 8-foot pieces, placed into three 20-yd<sup>3</sup> rolloff boxes, and removed from the site. All other RCRA hazardous wastes and their containers were removed from the site. The bags of solid materials inside the garage complex, determined to be sulfamic acid, were placed into four 1-yd<sup>3</sup> boxes for off-site disposal. The sampled drums from the garage complex were placed into overpacks, along with two labpacks of smaller containers, and removed for off-site disposal. All U.S. EPA site work was completed on November 17, 1997. No further U.S. EPA Removal Section action is planned at the site.

## **4. Migration and Exposure Pathway Factors and Targets**

This section describes the four migration and exposure pathways and targets associated with the Weltmeyer Auto site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

### **4.1 Groundwater Migration Pathway**

Any potential source of groundwater contamination at the site has been removed. Groundwater is not used for drinking in the site vicinity, and groundwater samples were not collected during the U.S. EPA emergency response actions at the site.

### **4.2 Surface Water Migration Pathway**

Runoff from the site drains to city storm sewers. The nearest surface water body to the site is the Little Calumet River, located approximately 0.8 mile northeast of the site. There is no evidence of surface water contamination attributable to the Weltmeyer Auto site. Drinking water in the site vicinity is supplied by the City of Chicago's municipal water system from intakes located in Lake Michigan.

### **4.3 Soil Exposure Pathway**

All RCRA hazardous wastes that spilled on the ground and were stored on site have been removed. Soil in the area of the acid spill was excavated from an area approximately 30 feet in diameter and to a depth of 4 inches bgs (Appendix B). U.S. Census data indicates that 12,249 persons reside within a 1-mile radius of the site, and 41,451 persons reside within a 2-mile radius of the site (Appendix C). Access to the site is not restricted, and trespassing and illegal salvaging was a routine occurrence.

#### **4.4 Air Migration Pathway**

Results of air monitoring at the site, conducted during the emergency response, indicated no levels above background for volatile organic gases, explosive gases, oxygen, carbon monoxide, or hydrogen sulfide (Appendix B). All contaminants with the potential to become airborne have been removed from the site.



## **5. Summary**

The Weltmeyer Auto site is an inactive truck and automotive repair shop located in Harvey, Cook County, Illinois. On October 22, 1997, an acid spill from a tanker on the east side of the site was reported to IEPA. On October 23, 1997, emergency responders from U.S. EPA, IEPA, and START met on site with officials from the Harvey Police and Fire Departments. The acid apparently pooled on the ground, reacted with underlying soil, and flowed downgradient under a neighboring storage trailer (Appendix B). START conducted air monitoring and collected seven samples during the emergency response.

Chemical analysis of the samples collected during the emergency response, led U.S. EPA to determine that the site posed an immediate threat to human health and the environment, and that a removal action was warranted. On October 24, 1997, an ERCS contractor began a removal action at the site. RCRA hazardous wastes and their containers, along with contaminated soil, were removed from the site. The acid tankers were cut into 6- by 8-foot pieces, placed into three 20-yd<sup>3</sup> rolloff boxes, and removed from the site for disposal. The removal action was completed on November 17, 1997, and no further U.S. EPA Removal Section action is planned at this time.

## **Appendix A**

### **Site Location Map**

**Source:** Ecology and Environment, Inc., February 4, 1998, *Letter Report for Acid Spill Site, Harvey, Cook County, Illinois.*

Map redacted due to geological  
and geophysical information

## **Appendix B**

### **E & E Letter Report**

**LETTER REPORT  
FOR  
ACID SPILL SITE  
a.k.a. WELTMEYER ACID SPILL SITE  
HARVEY, COOK COUNTY, ILLINOIS  
TDD: S05-9710-010  
PAN: 7C1001SIXX**

**February 4, 1998**

**Prepared for:**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Emergency and Enforcement Response Branch  
77 West Jackson Boulevard  
Chicago, Illinois 60604**

Prepared by: Steven J. Skare Date: 2/4/98  
Steve Skare, START Project Manager

Reviewed by: Mary Jane Ripp Date: 2/4/98  
Mary Jane Ripp, START Assistant Program Manager

Approved by: Thomas Kouris Date: 2/4/98  
Thomas Kouris, START Program Manager



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33 North Dearborn Street  
Chicago, Illinois 60602  
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February 4, 1998

Ms. Gail Nabasny, Project Officer  
Emergency Support Section  
U.S. Environmental Protection Agency  
77 West Jackson Boulevard  
Chicago, IL 60604

Re: Acid Spill Site  
a.k.a. Weltmeyer Acid Spill Site  
Harvey, Cook County, Illinois  
TDD: S05-9710-010  
PAN: 7C1001SIXX

Dear Ms. Nabasny:

The United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START), under Technical Direction Document (TDD) S05-9710-010, to provide support for an emergency response at the Acid Spill site. The site is an inactive truck and automotive repair shop located at 14752 Spaulding Avenue in Harvey, Cook County, Illinois (Attachment A, Figure 1). The site is located in a mixed residential and industrial area and consists of a garage complex, four tankers, and two storage trailers (Attachment A, Figure 2).

On October 22, 1997, an acid spill from a tanker located on the eastern side of the property was reported to the Illinois Environmental Protection Agency (IEPA). The tanker was apparently being salvaged for scrap metal and drain holes were cut into the tanker to drain the acid.

On October 23, 1997, emergency responders from IEPA, U.S. EPA, and START responded to the incident and met with officials from the Harvey Fire and Police Departments. An initial site reconnaissance performed by START, U.S. EPA On-Scene Coordinator (OSC) Kevin Turner, and IEPA representative Ed Osowski found the site to be overgrown with vegetation and in disrepair, with easy access to the public. The acid apparently had pooled on the ground, reacted with the underlying soil, and flowed downgradient under a neighboring storage trailer.

START conducted initial air monitoring of the spill area, the tankers, and inside the building. Results of the air monitoring indicated no levels above background for volatile organic gases, explosive gases, oxygen, carbon monoxide, or hydrogen sulfide.

Samples were collected from three of the four tankers, soil from the spill area, and from two drums and one storage bag located inside the garage complex. Samples T-01, T-03, and T-04 were collected from Tankers #1, #3, and #4, respectively. Sample S-01 was collected from soil east of

Tanker #3. Sample S-02 was collected from a bag inside the east bay of the garage area. Samples S-03 and D-01 were collected from drums inside the west bay of the garage area.

All the samples were analyzed for pH and total metals. In addition, the drum samples were analyzed for total volatile organic compounds and flash point. All samples were delivered to National Environmental Testing, Inc., in Bartlett, Illinois. Analytical results of the pH tests indicate levels of 1.65, 1.83, and 1.72 standard units in the three tanker samples. These results classify the samples as Resource Conservation and Recovery Act (RCRA) hazardous wastes. The sample results also indicated that the liquids in the tankers, the soil from the spill area, the contents of the storage bag, and one of the drums were acids. The remaining drum sample was considered to be flammable. All materials sampled posed a threat to human health and the environment.

On October 24, 1997, the U.S. EPA's Emergency Response Cleanup Services (ERCS) contractor mobilized to the Acid Spill site to initiate the removal of the hazardous wastes found on site. A uniloader was used to excavate the top 4 inches of contaminated soil from the spill area. The contaminated soil was placed in a rolloff box with other debris for disposal. All waste containers, including drums, bags, and small cans, were inventoried and consolidated inside a room in the garage complex. A total of four tanker trucks from Heritage Environmental were used to remove approximately 12,000 gallons of acid from the four tankers. An acid sludge remained in the bottom of the tankers after the liquid was removed. The sludge was placed into 55-gallon polyethylene drums for disposal. A total of 60 drums of acid sludge were containerized. When all wastes were removed from the tankers, the tankers were cut, up using a shears attachment on a excavator, into 6 by 8 feet pieces. The scrap metal was placed into three 20-cubic-yard rolloff boxes for disposal. The bags of green solid inside the garage complex were placed into four 1-cubic-yard boxes for disposal. The sampled drums from the garage complex were placed in overpacks for disposal.

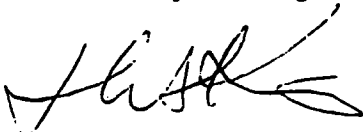
All site work was completed on November 17, 1997. The site was secured and all personnel departed site.

This Letter Report completes the requirements of this TDD. If you have any questions or require additional information, please contact our office at (312) 578-9243.

Sincerely,



Steve Skare  
START Project Manager



Thomas Kouris  
START Program Manager

**Attachments:** A - Figures  
B - Photodocumentation  
C - Validated Analytical Results  
D - Waste Disposal Table

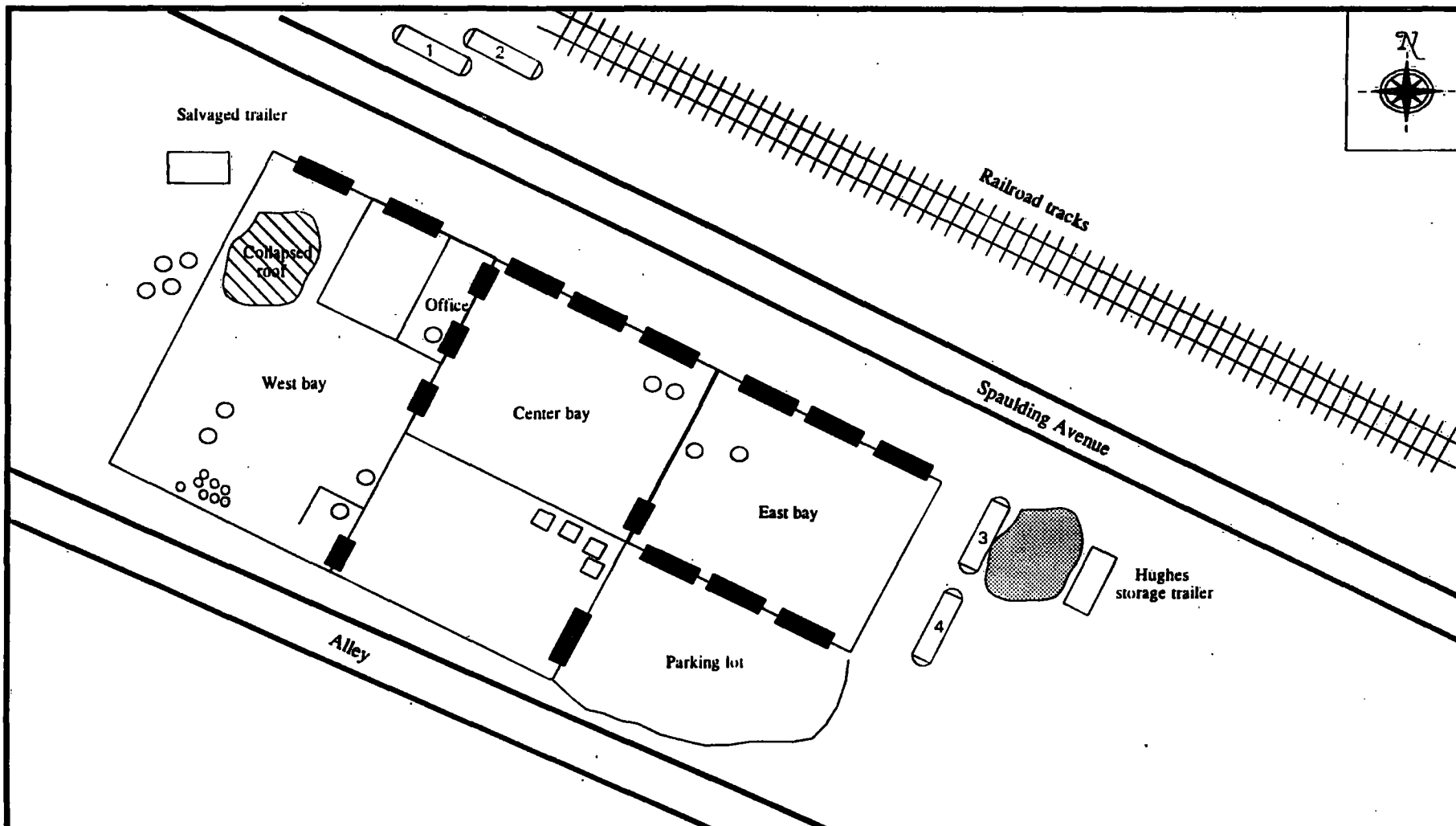
**cc:** Fred Bartman, U.S. EPA OSC  
START TDD File



**Attachment A**

**Figures**

Map redacted due to geological  
and geophysical information



**Legend**

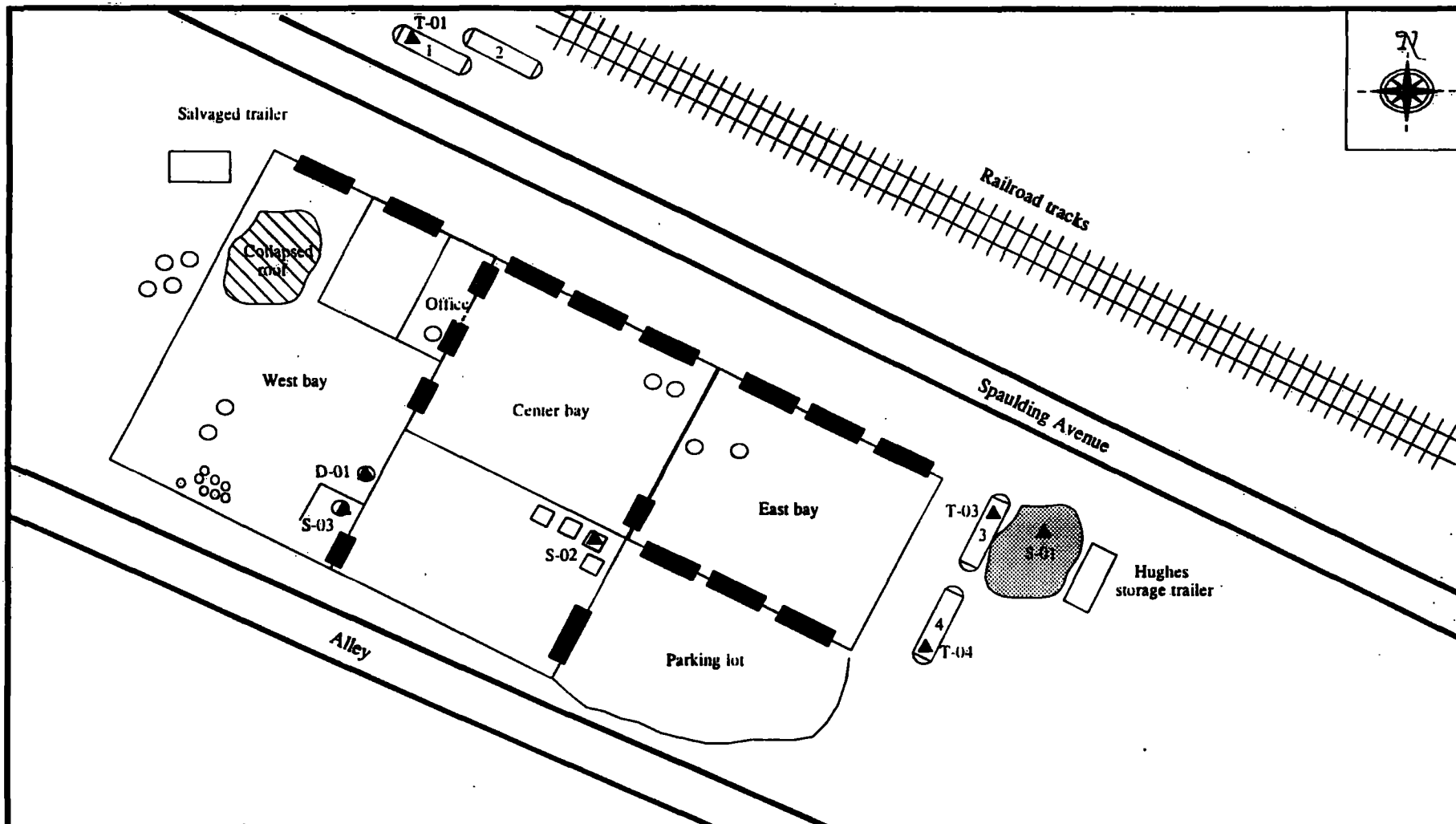
- |  |                            |  |                 |
|--|----------------------------|--|-----------------|
|  | Overhead door              |  | Door            |
|  | Drum                       |  | Small container |
|  | Acid spill area            |  | Tanker          |
|  | Bulkift bag w/ green solid |  |                 |



**ecology and environment, inc.**

Region 5 - Superfund Technical Assessment and Response Team  
33 North Dearborn, Suite 900, Chicago, Illinois 60602

TITLE	Site Features Map	FIGURE	2
SITE	Weltmeyer Acid Spill	SCALE	Not to Scale
CITY	Harvey	STATE	Illinois
SOURCE	Ecology and Environment, Inc.	TDD	S05-9710-010
		DATE	11/12/97



# **Legend**

- |  |                 |  |                 |
|--|-----------------|--|-----------------|
|  | Overhead door   |  | Door            |
|  | Drum            |  | Small container |
|  | Acid spill area |  | Tanker          |
|  | Bulk lift bag   |  | Sample location |



**ecology and environment, inc.**

Region 5 - Superfund Technical Assessment and Response Team

33 North Dearborn, Suite 900, Chicago, Illinois 60602

TITLE	Sample Location Map	FIGURE	3
SITE	Weltmeyer Acid Spill	SCALE	Not to Scale
CITY	Harvey	STATE	Illinois
SOURCE	Ecology and Environment, Inc.	TDD	S05-9710-010
		DATE	2/4/98

**Attachment B**

**Photodocumentation**



**SITE:** Weltmeyer Acid Spill  
**LOCATION:** Harvey, IL  
**SUBJECT:** Location of sample S-01.

**DATE:** October 23, 1997  
**DIRECTION:** Down

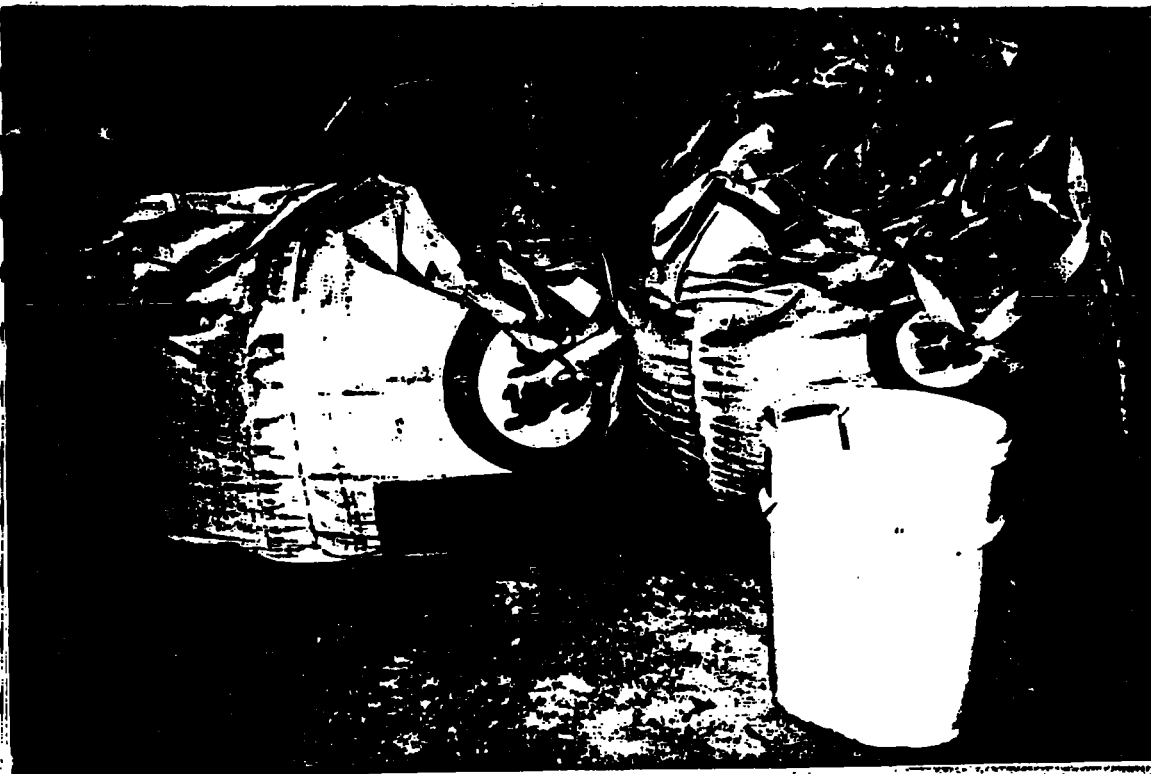
**TIME:** 1316 Hours  
**PHOTOGRAPHER:** S. Skare



**SITE:** Weltmeyer Acid Spill  
**LOCATION:** Harvey, IL  
**SUBJECT:** Tanker spill area where sample S-01 was taken.

**DATE:** October 23, 1997  
**DIRECTION:** South

**TIME:** 1317 Hours  
**PHOTOGRAPHER:** S. Skare



**SITE:** Weltmeyer Acid Spill

**DATE:** October, 23, 1997

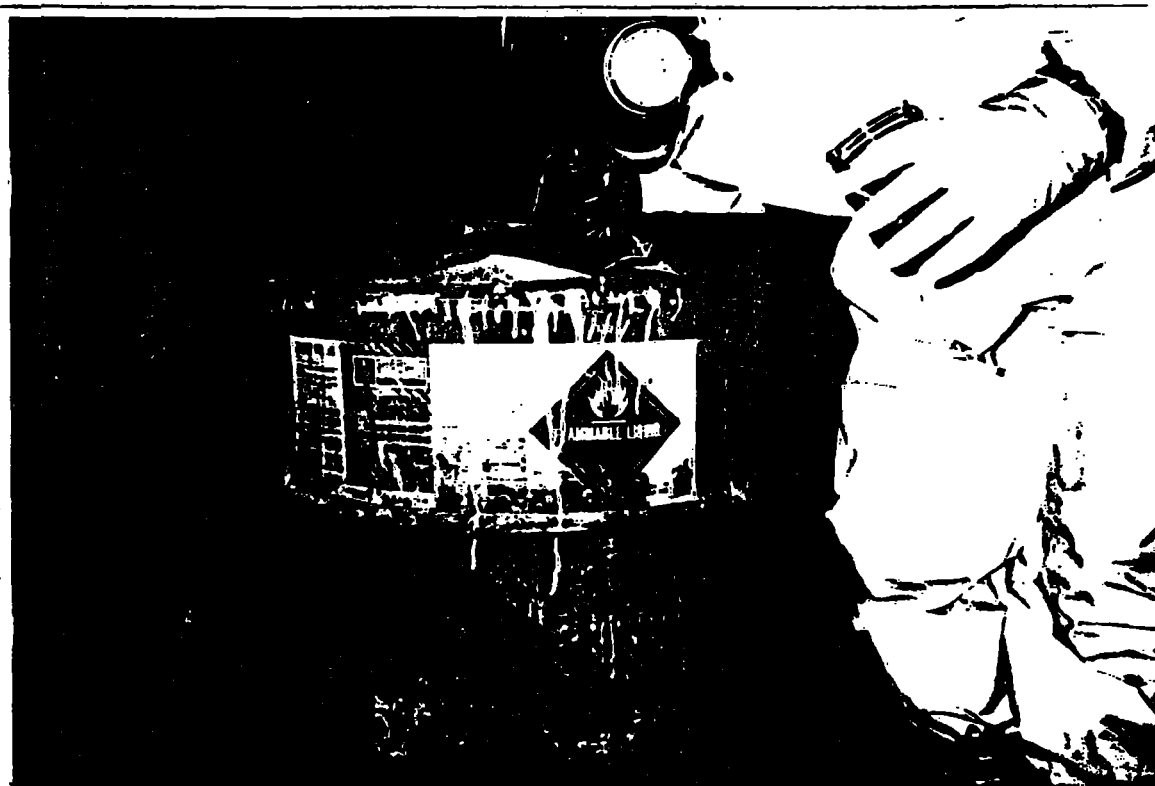
**TIME:** 1326 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Bags of green solid collected as sample S-02.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

**TIME:** 1350 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** East

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** View of "SHERWIN WILLIAMS" paint label on drum S-03.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

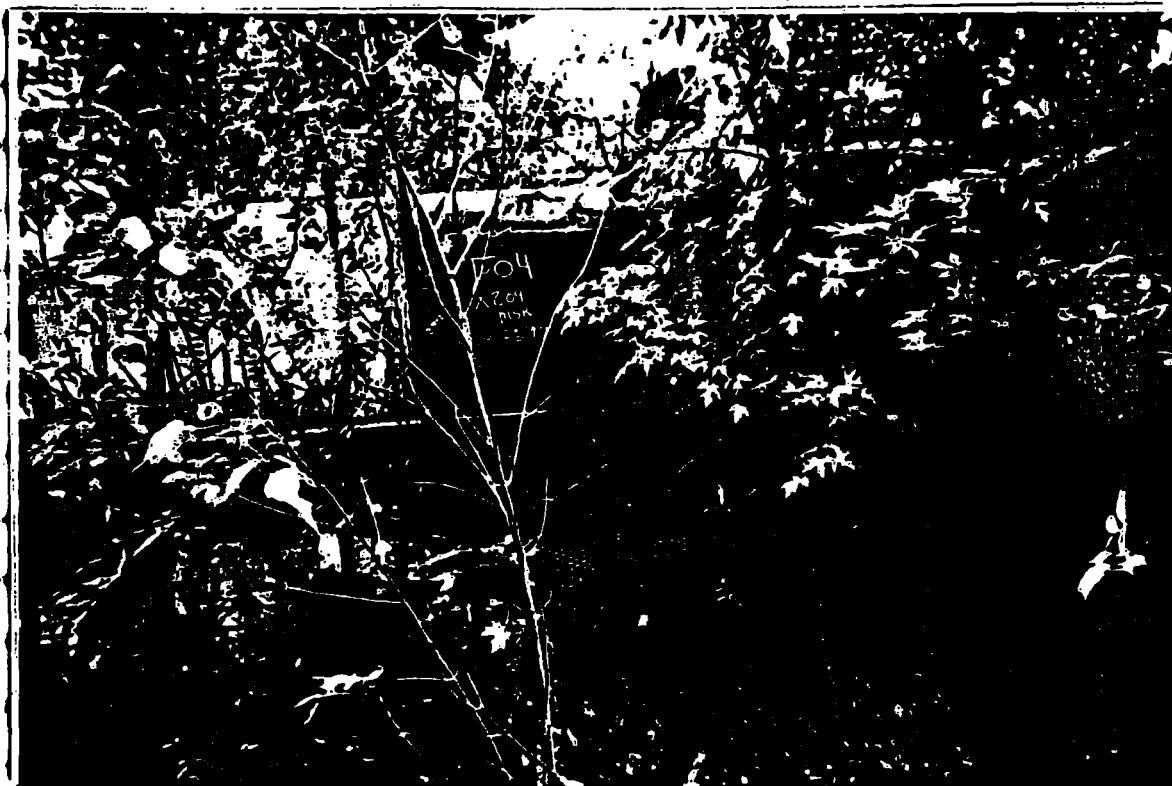
**TIME:** 1411 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** South

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** START collecting drum sample D-01.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

**TIME:** 1421 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** East

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** View of tanker T-04.

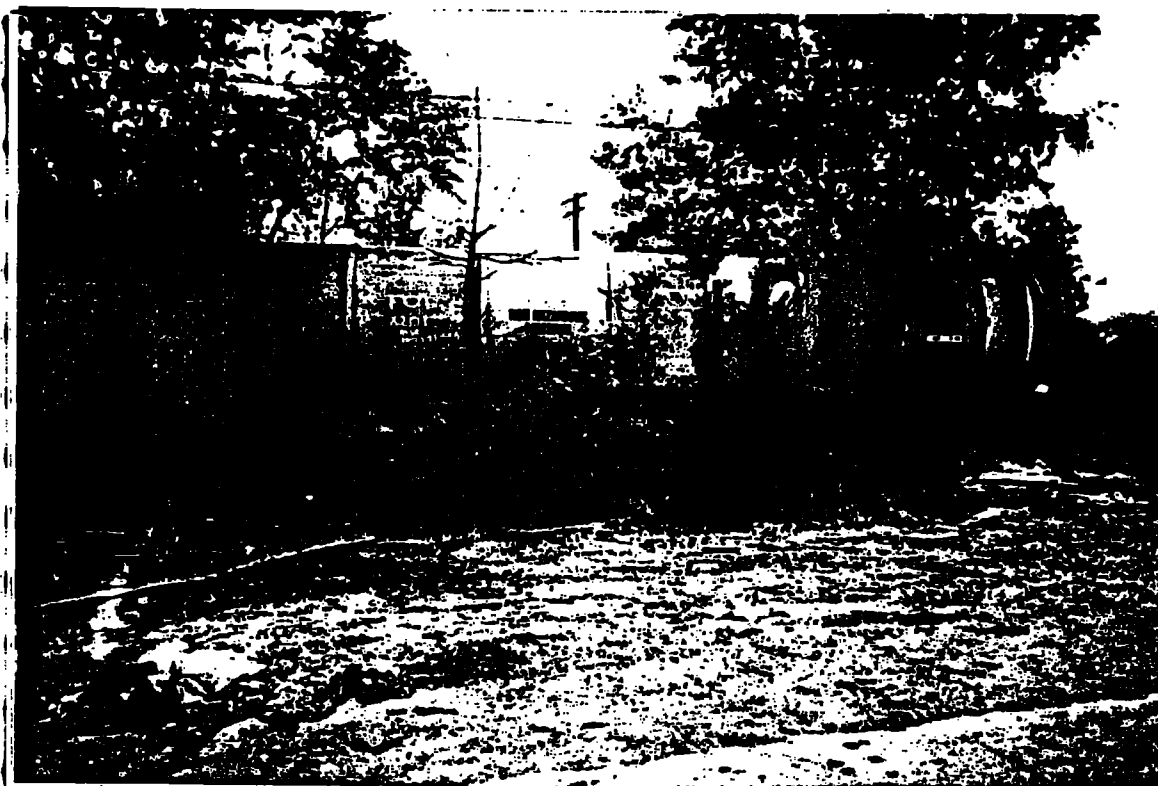




**SITE:** Weltmeyer Acid Spill  
**LOCATION:** Harvey, IL  
**SUBJECT:** View of tanker T-03.

**DATE:** October 23, 1997  
**DIRECTION:** East

**TIME:** 1422 Hours  
**PHOTOGRAPHER:** S. Skare



**SITE:** Weltmeyer Acid Spill  
**LOCATION:** Harvey, IL  
**SUBJECT:** View of tanker T-01; note the "nonhazardous material" label.

**DATE:** October 23, 1997  
**DIRECTION:** Northeast

**TIME:** 1428 Hours  
**PHOTOGRAPHER:** S. Skare



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

**TIME:** 1429 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** View of tanker T-01; note the "Licensed Special Waste Hauler" label.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

**TIME:** 1430 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** North

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** View of tanker T-02.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 23, 1997

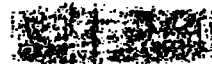
**TIME:** 1431 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** Southwest

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** View of the front of Weltmeyer Garage.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 24, 1997

**TIME:** 1705 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** Southwest

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** ERCS loading contaminated soil into rolloff box.





**SITE:** Weltmeyer Acid Spill

**DATE:** October 24, 1997

**TIME:** 1706 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** Southeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** ERCS using Bobcat to excavate soil from the spill area.



**SITE:** Weltmeyer Acid Spill

**DATE:** October 24, 1997

**TIME:** 1720 Hours

**LOCATION:** Harvey, IL

**DIRECTION:** Southeast

**PHOTOGRAPHER:** S. Skare

**SUBJECT:** Open manhole in side of tanker T-03.

## **Attachment C**

### **Validated Analytical Results**



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## M E M O R A N D U M

DATE: November 21, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Inorganic Data Quality Review for Resource Conservation and Recovery Act (RCRA) Metals, Acid Spill, Harvey, Cook County, Illinois

REFERENCE: Project TDD S05-9710-010 Analytical TDD S05-9710-807  
Project PAN 7C1001SIXX Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of five drum/tanker samples and two soil samples collected from the Acid Spill site is complete. The samples were collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 6010 and 7000.

### Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
T-01	440284
T-03	440385
T-04	440286
S-01	440287
S-02	440288
S-03	440289
D-01	440290

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 23, 1997, and analyzed on October 30 and 31, 1997. Analysis for mercury was performed on October 30, 1997. This is within the 6-month (28 days for mercury) holding time limit.

II. Calibration:

• Initial Calibration: Acceptable

Recoveries for the initial calibration verification were within 90 to 110% (80 to 120% for mercury), as required. The correlation coefficient for mercury exceeded 0.995.

• Continuing Calibration: Acceptable

All analytes included in the continuing calibration verification standard were within 90 to 110% (80 to 120% for mercury), as required.

III. Blanks: Acceptable

Calibration and preparation blanks were analyzed with each analytical batch. No target analytes were detected in the blanks.

IV. Overall Assessment of Data For Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) Data Validation Procedures, Section 3.0, Metallic Inorganic Parameters. Based upon the information provided, the data are acceptable for use.



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Chicago, Illinois 60602  
Tel. 312/578-9243, Fax: 312/578-9345

## M E M O R A N D U M

DATE: November 21, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Organic Data Quality Review for Volatile Organic Compounds (VOCs), Acid Spill, Harvey, Cook County, Illinois

REFERENCE: Project TDD S05-9710-010 Analytical TDD S05-9710-807  
Project PAN 7C1001SIXX Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of one drum sample collected from the Acid Spill site is complete. The sample was collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The sample was submitted to NET Laboratories, Bartlett, Illinois. The laboratory analysis was performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Method 8260.

### Sample Identification

START  
Identification No.

D-01

Laboratory  
Identification No.

440290

### Data Qualifications:

#### I. Sample Holding Time: Acceptable

The samples were collected on October 23, 1997, and analyzed on October 27, 1997. This is within the 14-day holding time limit.



II. Gas Chromatography/Mass Spectrometry (GC/MS) Tuning:  
Acceptable

GC/MS tuning to meet ion abundance criteria using bromofluorobenzene (BFB) were acceptable and sample was analyzed within 12 hours of BFB tuning.

III. Calibrations:

• Initial Calibration: Qualified

A five-point initial calibration was performed prior to analysis. All average response factors were greater than 0.05 except methyl ethyl ketone; therefore, the nondetect value for this compound has been flagged "R", as required. The percent relative standard deviations (%RSDs) between response factors were less than 30% for all detected target compounds.

• Continuing Calibration: Acceptable

The percent differences of the response factors were less than 25%, as required for detected target compounds.

IV. Blank: Acceptable

A method blank was analyzed with the sample. No target compounds or contaminants were detected in the blank!

V. Internal Standards: Acceptable

The areas of the internal standards in the sample were within -50% to +100% of the associated calibration check standard. The retention times of the internal standards were within the 30-second control limit.

VI. Compound Identification: Acceptable

The mass spectra and retention times of the detected compounds matched those of the standards.

VII. Additional QC Checks: Acceptable

The recoveries of the surrogates used in the sample and blank were within laboratory-established guidelines.

Acid Spill  
Project TDD S05-9710-010  
Analytical TDD S05-9710-807  
VOCs  
Page 3

VIII. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 5.0, VOAs By GC/MS analysis. Based upon the information provided, the data are acceptable for use, with the above-stated qualifications.

Data Qualifiers and Definitions:

R - The sample results are rejected (analyte may or may not be present) due to gross deficiencies in quality control criteria. Any reported value is unusable. Resampling and/or reanalysis is necessary for verification.

M E M O R A N D U M

DATE: November 21, 1997

TO: Steve Skare, START Project Manager, E & E, Chicago, Illinois

FROM: David Hendren, START Analytical Services Manager, E & E, Chicago, Illinois

THROUGH: Mary Jane Ripp, START Assistant Program Manager, E & E, Chicago, Illinois

SUBJECT: Data Quality Review for Flash Point and pH, Acid Spill, Harvey, Cook County, Illinois

REFERENCE: Project TDD S05-9710-010 Analytical TDD S05-9710-807  
Project PAN 7C1001SIXX Analytical PAN 7CAG01TAXX

The data quality assurance (QA) review of five tanker/drum samples and two soil samples collected from the Acid Spill site is complete. The samples were collected on October 23, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to NET Laboratories, Bartlett, Illinois. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste 846 Methods 1010 and 9045. (Analysis of flash point was performed only on D-01.)

Sample Identification

<u>START</u> <u>Identification No.</u>	<u>Laboratory</u> <u>Identification No.</u>
T-01	440384
T-03	440385
T-04	440286
S-01	440287
S-02	440288
S-03	440289
D-01	440290

Acid Spill  
Project TDD S05-9710-010  
Analytical TDD S05-9710-807  
Flash Point, pH  
Page 2

Data Qualifications:

I. Sample Holding Time: Acceptable

The samples were collected on October 23, 1997, and analyzed on October 29, 1997. The Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01 (April 1990) does not specify holding times for these parameters.

II. Calibrations: Acceptable

The calibrations for flash point and pH were verified before sample analyses. The calibration for flash point was verified using xylene and the calibration for pH was verified following analyses of three standard solutions.

III. Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on criteria for QA Level II as outlined in OSWER Data Validation Procedures, Section 9.0, Generic Data Validation Procedures. Based upon the information provided, the data are acceptable for use.



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440284

NET Job No.: 97.12764

Sample Description: Tanker #1; T-01  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 12:15  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	1.65	units	10/29/1997	0.10	tcl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/31/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtc	875 1571	6010 (1)
Cadmium, ICP	1.8	ug/g	10/30/1997	0.50	jtc	875 1556	6010 (1)
Chromium, ICP	21	ug/g	10/30/1997	2.0	jtc	875 1538	6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtc	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/31/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0 MX	ug/g	10/31/1997	2.0	sep	363 465	7760 (1)

MX : Dilution required due to sample matrix; analyte is not detected.

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**ANALYTICAL REPORT**

ONMENT, INC

11/01/1997

Sample No. : 440285

02

NET Job No.: 97.12764

ion: Tanker #3; T-03  
Analytical; S05-9710-807

/23/1997  
:40  
100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
1.83	units	10/29/1997	0.10	ctl	26	9045B (1)
<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
<1.0	ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
3.8	ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
13	ug/g	10/30/1997	2.0	jtt	875 1538	6010 (1)
8.8	ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
<2.0 MX	ug/g	10/30/1997	2.0	sep	363 464	7760 (1)

ample matrix; analyte is not detected.



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440286

NET Job No.: 97.12764

Sample Description: Tanker #4; T-04  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 12:50  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	1.72	units	10/29/1997	0.10	tcl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
Cadmium, ICP	6.6	ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
Chromium, ICP	19	ug/g	10/30/1997	2.0	jtt	875 1538	6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0 MX	ug/g	10/30/1997	2.0	sep	363 464	7760 (1)

MX : Dilution required due to sample matrix; analyte is not detected.



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440287

NET Job No.: 97.12764

Sample Description: Soil East of Tanker #3; S-01  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 13:15  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	3.96	units	10/29/1997	0.10	ttl	26	9045B (1)
Arsenic, GFAA	4.6	M+	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	68	ug/g	10/30/1997	1.0	jtc	875 1571	6010 (1)
Cadmium, ICP	3.4	ug/g	10/30/1997	0.50	jtc	875 1556	6010 (1)
Chromium, ICP	28	ug/g	10/30/1997	2.0	jtc	875 1538	6010 (1)
Lead, ICP	64	ug/g	10/30/1997	4.0	jtc	875 1764	6010 (1)
Mercury, CVAA	0.054	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	0.65	M+	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	ug/g	10/30/1997	2.0	sep	363 464	7760 (1)

M+ : Analyte quantified by MSA due to low spike recovery.





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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440288

NET Job No.: 97.12764

Sample Description: Bag Inside E. Garage; S-02  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 13:25  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	2.99	units	10/29/1997	0.10	tcl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	1.7	ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
Cadmium, ICP	8.1	ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
Chromium, ICP	<2.0	ug/g	10/31/1997	2.0	kdw	875 1539	6010 (1)
Lead, ICP	48	ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	ug/g	10/30/1997	2.0	sep	363 464	7760 (1)



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
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Chicago, IL 60602

11/01/1997

Sample No. : 440289

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; S-03  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 13:50  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	2.25	units	10/29/1997	0.10	ttl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	5.2	ug/g	10/30/1997	1.0	jtt	875 1571	6010 (1)
Cadmium, ICP	0.56	ug/g	10/30/1997	0.50	jtt	875 1556	6010 (1)
Chromium, ICP	3.4	ug/g	10/31/1997	2.0	kdw	875 1539	6010 (1)
Lead, ICP	20	ug/g	10/30/1997	4.0	jtt	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	ug/g	10/30/1997	2.0	sep	363 464	7760 (1)



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## ANALYTICAL REPORT

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33 N. Dearborn  
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Chicago, IL 60602

11/01/1997

Sample No. : 440290

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; D-01  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 14:10  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
pH, Non-Aqueous	5.22	units	10/29/1997	0.10	ctl	26	9045B (1)
Arsenic, GFAA	<0.50	ug/g	10/30/1997	0.50	mhp	62 413	7060 (1)
Barium, ICP	<1.0	ug/g	10/30/1997	1.0	jtc	875 1571	6010 (1)
Cadmium, ICP	<0.50	ug/g	10/30/1997	0.50	jtc	875 1556	6010 (1)
Chromium, ICP	<2.0	ug/g	10/30/1997	2.0	jtc	875 1538	6010 (1)
Lead, ICP	<4.0	ug/g	10/30/1997	4.0	jtc	875 1764	6010 (1)
Mercury, CVAA	<0.040	ug/g	10/30/1997	0.040	sep	547 657	7471A (9)
Selenium, GFAA	<0.25	ug/g	10/30/1997	0.25	mhp	62 348	7740 (1)
Silver, AA	<2.0	MX ug/g	10/30/1997	2.0	sep	363 464	7760 (1)
VOLATILES - 8260 NonAqueous							
Acetone	<23,000	ug/Kg	10/27/1997	100	llj	258	8260A (9)
Acrylonitrile	<12,000	ug/Kg	10/27/1997	50	llj	258	8260A (9)
Benzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Bromobenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Bromochloromethane	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Bromodichloromethane	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Bromoform	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Bromomethane	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
n-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
sec-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
tert-Butylbenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Carbon tetrachloride	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Chlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Chlorodibromomethane	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Chloroethane	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)
Chloroform	<1,200	ug/Kg	10/27/1997	5.0	llj	258	8260A (9)

VOC analysis performed at a 230x dilution due to sample matrix.

MX : Dilution required due to sample matrix; analyte is not detected.



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440290

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; D-01  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 14:10  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
Chloromethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
2-Chlorotoluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
4-Chlorotoluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2-Dibromo-3-chloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2-Dibromoethane (EDB)	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Dibromomethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,3-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,4-Dichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Dichlorodifluoromethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1-Dichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2-Dichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
cis-1,2-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
trans-1,2-Dichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,3-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
2,2-Dichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
cis-1,3-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
trans-1,3-Dichloropropene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Ethylbenzene	1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
2-Hexanone	<23,000	ug/Kg	10/27/1997	100	11j	258	8260A (9)
Hexachlorobutadiene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Iodomethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Isopropylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
p-Isopropyltoluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)

VOC analysis performed at a 230x dilution due to sample matrix.



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## ANALYTICAL REPORT

Mr. Dave Hendren  
ECOLOGY & ENVIRONMENT, INC  
33 N. Dearborn  
Suite 900  
Chicago, IL 60602

11/01/1997

Sample No. : 440290

NET Job No.: 97.12764

Sample Description: Drum Inside W. Garage; D-01  
Analytical; S05-9710-807

Date Taken: 10/23/1997  
Time Taken: 14:10  
IEPA Cert. No. 100221

Date Received: 10/24/1997  
Time Received: 15:20  
WDNR Cert. No. 999447130

Parameter	Results	Units	Date of Analysis	Method PQL	Analyst	Batch No. Prep/Run	Analytical Method
Methyl Ethyl Ketone	<23,000 <sup>K</sup>	ug/Kg	10/27/1997	100	11j	258	8260A (9)
Methyl Isobutyl Ketone	<23,000	ug/Kg	10/27/1997	100	11j	258	8260A (9)
Methylene Chloride	<12,000	ug/Kg	10/27/1997	50	11j	258	8260A (9)
Methyl-tert-butyl ether	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Napthalene	110,000	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
n-propylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Styrene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,1,2-Tetrachloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,2,2-Tetrachloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Tetrachloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Toluene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,3-Trichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,4-Trichlorobenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,1-Trichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,1,2-Trichloroethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Trichloroethene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Trichlorofluoromethane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,3-Trichloropropane	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,2,4-Trimethylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
1,3,5-Trimethylbenzene	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Vinyl chloride	<1,200	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Xylenes	7,000	ug/Kg	10/27/1997	5.0	11j	258	8260A (9)
Surr: Dibromofluoromethane	104.6	%	10/27/1997	80-120	11j	258	8260A (9)
Surr: Toluene-d8	86.2	%	10/27/1997	81-117	11j	258	8260A (9)
Surr: 4-Bromofluorobenzene	98.6	%	10/27/1997	74-121	11j	258	8260A (9)
Ignitability (Flash Point)	>212	deg F	10/29/1997	>212	jrs	659	1010 (1)

VOC analysis performed at a 230x dilution due to sample matrix.

**Attachment D**

**Waste Disposal Table**

**Table 1**

**WASTE DISPOSAL TABLE  
ACID SPILL SITE  
a.k.a. WELTMAYER ACID SPILL SITE  
HARVEY, COOK COUNTY, ILLINOIS**

<b>Wastestream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Treatment</b>	<b>Disposal</b>
Hazardous waste liquid	Acid from tankers	12,000 gallons	Neutralization	Heritage Environmental, Indianapolis, Indiana
Nonhazardous waste solid	Drums of grease	55 gallons	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste liquid	Drums of paint	110 gallons	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste liquid/solid	Aerosols and small containers	2 lab packs	NA	Heritage Environmental, Lemont, Illinois
Nonhazardous waste solid	Soil	10 cubic yards	Landfill	Heritage Environmental, Indianapolis, Indiana
Hazardous waste Solid	Bags of sulfamic acid	4 cubic yards	NA	Heritage Environmental, Lemont, Illinois
Hazardous waste solid	Metal from tankers	60 cubic yards	Landfill	NA

**Key:**

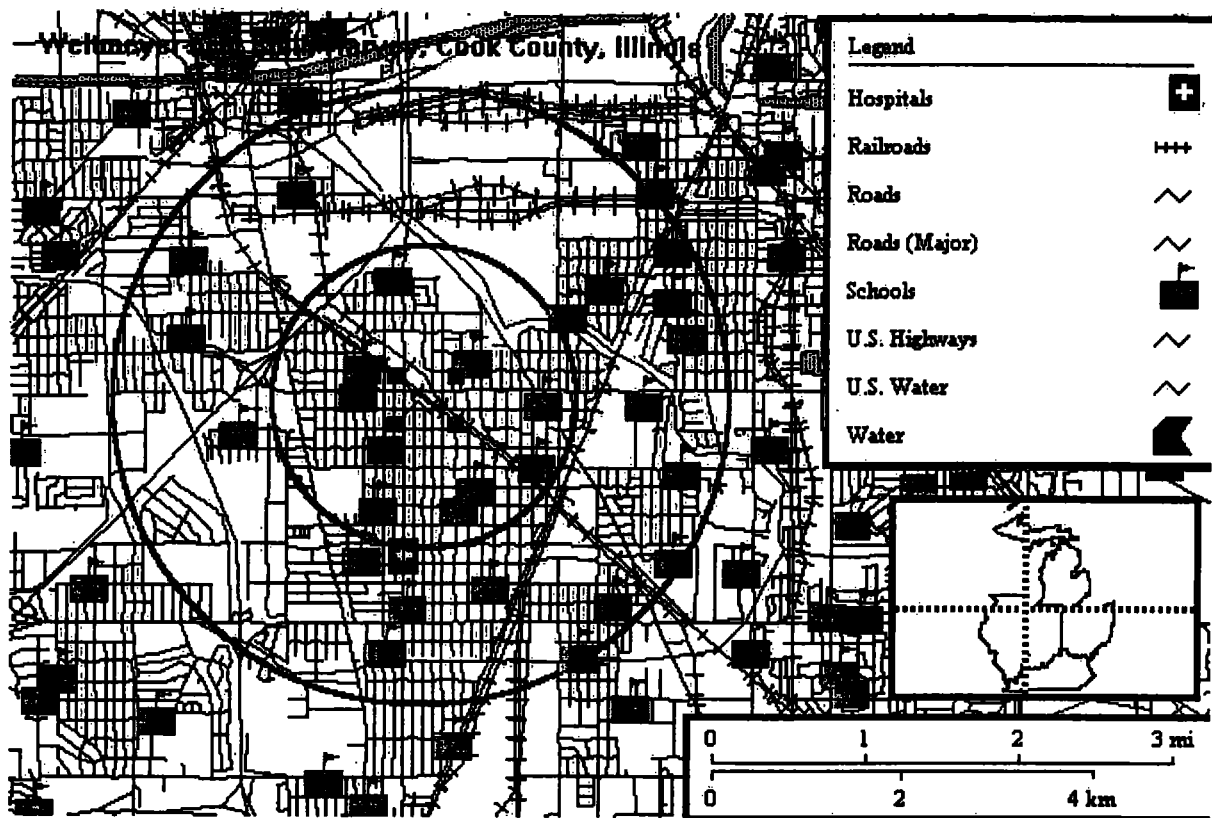
NA = No information available.

Source: Ecology and Environment, Inc., 1998.

## **Appendix C**

### **Census Data**





Weltmeyer Acid Spill, Harvey, Cook County, Illinois

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Aggregate Personal Income:	106743716
American Indian:	24
Asian/Pacific Islander:	33
Black Population:	10020
Hispanic Population:	718
Land Area (sq. Miles):	3.14
Latitude Internal Point:	
Longitude Internal Point:	
METHOD:	Block Group Proration method.
Minority Population:	10727
Number Of Families:	2839
Number Of Households:	3918
Number Of Persons:	12429
Number Of Persons (stf3):	12366
Number of Housing Units:	0
Other Race:	475
Percent Asian:	0.3
Percent Below Poverty:	25.7
Percent Black:	80.6
Percent Hispanic:	5.8
Percent Indian:	0.2
Percent Minority:	86.3
Percent Other Race:	3.8
Percent White:	15.1
Persons Below Poverty:	3195
RADIUS:	1.00 miles
SOURCE:	Summary of 22 Block Groups
STATEFP:	
Water Area (sq. Miles):	0.0
White Population:	1877

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Weltmeyer Acid Spill, Harvey, Cook County, Illinois

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Aggregate Personal Income:	412698776
American Indian:	86
Asian/Pacific Islander:	103
Black Population:	26666
Hispanic Population:	2430
Land Area (sq. Miles):	12.57
Latitude Internal Point:	
Longitude Internal Point:	
METHOD:	Block Group Proration method.
Minority Population:	29123
Number Of Families:	10057
Number Of Households:	13675
Number Of Persons:	41451
Number Of Persons (stf3):	41380
Other Race:	1384
Percent Asian:	0.2
Percent Below Poverty:	19.4
Percent Black:	64.3
Percent Hispanic:	5.9
Percent Indian:	0.2
Percent Minority:	70.3
Percent Other Race:	3.3
Percent White:	31.9
Persons Below Poverty:	8044
RADIUS:	2.00 miles
Renter Occupied:	4642
SOURCE:	Summary of 63 Block Groups
Water Area (sq. Miles):	0.0
White Population:	13212

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Weltmeyer Acid Spill, Harvey, Cook County, Illinois

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Age 0 Thru 4:	2822
Age 05 Thru 09:	2717
Age 10 Thru 19:	5768
Age 20 Thru 49:	12533
Age 50 Thru 64:	3472
Age 65 And Over:	2459
Aggregate Personal Income:	258675833
American Indian:	73
Asian/Pacific Islander:	81
Black Population:	23813
FIPS Place Code:	33383
FIPS State Code:	17
FIPS State_County Code:	17031
High Owner Cost:	24.3
High Renter Cost:	61.5
Hispanic Population:	1932
Houses built before 1940:	2134
Land Area (sq. Miles):	6.2
Latitude Internal Point:	+41607250
Lived in same house 1985:	57.0
Longitude Internal Point:	-087651896
Median Household Income:	23201
Median YR house built:	1955
Minority Population:	25715
Number Of Families:	6818
Number Of Households:	9052
Number Of Persons:	29771
Number Of Persons (stf3):	29767
Number of Housing Units:	10312
Other Race:	1314
Owner Occupied:	5325
Percent Age 0 Thru 4:	9.5
Percent Age 05 Thru 09:	9.1
Percent Age 10 Thru 19:	19.4
Percent Age 20 Thru 49:	42.1
Percent Age 50 Thru 64:	11.7
Percent Age 65 And Over:	8.3
Percent Asian:	0.3
Percent Bachelors degree:	7.1
Percent Below Poverty:	25.6

Weltmeyer Acid Spill, Harvey, Cook County, Illinois

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Percent Black:	80.0
Percent High School grad.:	66.6
Percent Hispanic:	6.5
Percent Indian:	0.2
Percent Minority:	86.4
Percent Other Race:	4.4
Percent Owner Occupied:	58.8
Percent Renter Occupied:	41.2
Percent Rural Population:	0.0
Percent Urban:	100.0
Percent White:	15.1
Persons Below Poverty:	7486
Place Name:	HARVEY CITY, IL
Renter Occupied:	3727
School Enrollment:	7145
State Abbreviation:	IL
Water Area (sq. Miles):	0.0
White Population:	4490

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## ecology and environment, inc., telephone log

[illegible]

**Appendix D**

**Telephone Log - City of Harvey**